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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/666,109 | 09/18/2003 | David E. Gideon | 38190/265128 | 7121 |
| 826 | 7590 | 08/15/2005 | EXAMINER | |
| ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000 | | | DANIELS, MATTHEW J | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 1732 |

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/666,109 | GIDEON ET AL. |
| | Examiner | Art Unit |
| | Matthew J. Daniels | 1732 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 18-44 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/18/03, 2/1/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-17, drawn to a method of making a reaction injection member having a desired contour, classified in class 264, subclass 54.
 - II. Claims 18-44, drawn to a reaction injection member having a desired contour, classified in class 428, subclass 304.4.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as one wherein the desired contour was applied to the foam material after the molding.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Nicholas F. Gallo on 04/20/2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-4 and 7** are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (USPN 4189544). **As to Claim 1**, Thompson teaches a method for forming a reaction injection member (8:28-32) having a desired contour comprising:

- a) providing a mold having a predetermined contour corresponding to the desired contour of the member (inherent in the RIM process, 8:28-32); and
- b) injecting a foam material including a blowing agent (13:50-68) into the cavity such that the foam material is disposed against the predetermined contour and expands to form the member having an average density of less than about 6 pounds per cubic foot (10:32). **As to Claims 2-4**, Thompson also teaches less than 3 pounds per cubic foot (10:32). **As to Claim 7**, Thompson teaches flame retardants (7:65-8:4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. **Claims 1-7**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (USPN 5169877) in view of Harper (USPN 4239857). **As to Claim 1**, Tucker teaches a method for making a reaction member having a desired contour, the method comprising:

- a) providing a mold defining a cavity having a predetermined contour corresponding to the desired contour of the member (10:1-11); and
- b) pouring a foam material including a blowing agent into the cavity such that the foam material is disposed against the predetermined contour and expands to form the member having an average density of less than about 6 pounds per cubic foot (8:5-24). Although Tucker teaches pouring (10:1) and appears to be silent to “injecting,” injecting would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention. Harper teaches this aspect of the invention (Columns 1 and 7). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate Harper’s reaction injection molding process with the method of Tucker in order to improve the speed of the casting process (Harper, 1:15-20 and 2:38-42). One would have been motivated to make the combination in order to achieve cycle times of one minute or less (Harper, 2:40-42) as contrasted with Tucker’s times of several minutes (See Tables I and II, Rise Profile, columns 10-11). **As to Claims 2-4**, Tucker teaches a maximum density less than 10 pounds per cubic foot (8:5-24), a maximum density of 6 pounds per cubic foot (8:5-24), and a three rise density less than 3 pounds per cubic foot (8:5-24). **As to Claim 5**, Tucker teaches the claimed range (8:19-24). **As to Claim 6**, Tucker teaches the claimed range (7:24-29). **As to Claim 7**, Tucker teaches fire retardants (8:39).

7. **Claim 8**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (USPN 5169877) in view of Harper (USPN 4239857), and further in view of Chen (USPN 5688857).

Tucker and Harper teach the subject matter of Claim 1. See the rejection of Claim 1 under 35 USC 103(a). **As to Claim 8**, Tucker and Harper appear to be silent to phosphoric acid.

However, Chen teaches that phosphoric acid included in a percent greater than 1% serves as a bench life extender (3:31-58) in polyurethane systems. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Chen into that of Tucker in order to extend the bench life of Tucker's mixture and allow additional time for fabrication and reduced material discard.

8. **Claims 9, 11-14, 16, 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (USPN 5169877) in view of Harper (USPN 4239857), and further in view of Uchiyama (USPN 4465710). Tucker and Harper teach the subject matter of Claim 1. See the rejection of Claim 1 under 35 USC 103(a). **As to Claims 9, 11, 12, 13, and 14**, Uchiyama teaches foaming around a support member disposed in the cavity (2:25-53), a support member defining a surface (Fig. 2, Item 2), first and second support members defining opposite surfaces (Fig. 2, Items 2 and 8), a fastener disposed before injecting and disposed within the member (Fig. 2, Item 4), and an aperture and fastener in the aperture (Fig. 2, Items 2 and 4). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Uchiyama into that of Tucker in order to provide one support member having strength and a second support member having a pleasing appearance suitable for interior trim components (1:9-21). **As to Claims 16 and 17**, although Tucker, Harper, and Uchiyama are silent to the claimed

limitations, Uchiyama teaches an overhead consolebox for an automobile (1:20). It is the Examiner's position that it would have been obvious that trim fabrication methods for an automobile would have also been suitable for aircraft trim parts including stowage bins having elongate portions and interior panels having elongate surfaces. These limitations appear to be drawn to particular intended uses and do not materially affect the claimed method. The articles formed by the combined method of Tucker, Harper, and Uchiyama would have been capable of performing the functions claimed, and therefore meet the limitations of the claimed method.

9. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (USPN 5169877) in view of Harper (USPN 4239857), Uchiyama (USPN 4465710), and further in view of Vanderhider (USPN 4269945). Tucker, Harper, and Uchiyama teach the subject matter of Claim 9. See the rejection of Claim 9 under 35 USC 103(a). **As to Claim 10**, Tucker, Harper, and Uchiyama are silent to reinforcement, however, fiberglass reinforcement was well known in polyurethanes. Vanderhider teaches this being a particularly suitable modifier or filler (5:65-6:3). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Vanderhider into that of Tucker and Uchiyama in order to produce a stronger trim article.

10. **Claims 9 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker (USPN 5169877) in view of Harper (USPN 4239857), and further in view of Sanok (USPN 4761916). Tucker and Harper teach the subject matter of Claim 1. See the rejection of Claim 1 under 35 USC 103(a). **As to Claim 9**, Sanok teaches disposing at least one elongate support

member and foam forming around at least part of the support member (Figs. 7 and 8). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Sanok into that of Tucker in order to provide a strong and secure bond between a urethane gasket member and glass window panel (2:45-49 and 2:59-64). **As to Claim 15**, Sanok teaches at least a window (Fig. 2, Item 16, Fig. 6, Fig. 7) being disposed within the mold.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Thursday, 7:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJD 8/2/05

MJD

Michael P. Colaianni
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